

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
SUPPLEMENTAL APPLICATION

SENIOR ATMOSPHERIC MODELER

OPEN: February 23, 2005

CLOSE: March 15, 2005

Instructions: Please respond to each of the following questions below. Please limit your responses to one page per question. This information may be used to determine those applicants with the most directly related experience, education, and training to continue in the selection process. **Please do not combine your responses or reference your application, resume, or any other requested documentation that you have included with your application packet to answer a question.**

Please be advised that the information you provide will be evaluated "as is" and incomplete or illegible applications will likely receive lower ratings. Therefore, it is very important to provide a concise, organized, and easy to follow response to each question.

1. Describe your education as it qualifies you for the position. Include your area of study and any degrees or certificates received. Also, indicate applicable coursework completed and the number of semester units for each course.
2. Please describe in detail your experience in modeling and scientific research involving air quality or atmospheric sciences.

Explanation for Questions 3-5

The District currently uses several models such as MM5, CAMx, and CMAQ. The District is also planning to use an emissions inventory model such as EMS-95 as well as a meteorological model such as WRF. For data and model analyses, we use several visualization systems: NCAR graphics, AVS, and PAVE. FORTRAN77, FORTRAN90, C, C++, and PERL are commonly used programming languages. A Linux-based computer cluster is used for model runs.

Please respond to the following questions with information most relevant to the modeling systems and tools described above. Include the number of years of experience. If it was not a full-time position, you must provide the average number of hours per week you performed the work (e.g., 20 hours a week for one year).

3. Describe in detail your experience with meteorological models, including:
 - a) Installing models and preparing inputs;
 - b) Evaluating model performance and diagnosing problems;
 - c) Conducting simulations to address a specific problem, issue or need;
 - d) Improving models.
4. Describe in detail your experience with photochemical models, including:
 - a) Installing models and preparing inputs;
 - b) Evaluating model performance and diagnosing problems;
 - c) Conducting simulations to address a specific problem, issue or need;
 - d) Using sensitivity analysis tools to evaluate model sensitivities;
 - e) Evaluating uncertainty in the results.
5. Describe in detail the extent of your experience with the following:
 - a) Computer system management;
 - b) Working with large FORTRAN or C/C++ scientific programs;
 - c) Any tools you have used to diagnose problems with large modeling systems;
 - d) Any visualization or other tools you have used to evaluate data such as observations and model I/O.
6. Please describe your lead or supervisory experience. Include the number of employees/contractors supervised, their titles, and the duration of the experience.

Please return this signed form attached to your responses.

I certify that the information provided on all application materials is accurate and complete to the best of my knowledge. I understand that any falsification may cancel any terms, conditions, or privileges of employment.

SIGNATURE: _____

DATE: _____